IN THE SPECIFICATION:

At page 1, immediately after the title, insert:

-- CROSS REFERENCE TO RELATED APPLICATION

This application is a continuation of International Application No.

PCT/JP01/02547, filed March 28, 2001, in the Japanese Receiving Office in the Japanese language, which claims benefit of priority of Japanese Application No. 2001-062224, filed March 6, 2001.--

Please amend the five paragraphs on page 4 at lines 1-20 as follows:

--storage means for storing unit adapted to store the calculation information to calculate the attitude and/or position of said measurement object on the basis of an output from said attitude sensor,

target image setting means for setting unit adapted to set a target image that is an object for detecting a predetermined index on the basis of a picked-up image picked up by said image pick-up device,

detecting means for detecting unit adapted to detect the position of said index in said target image by performing a template matching process between a template image of said index and said target image,

updating means for updating unit adapted to update said calculation information stored in said storage [[means]] unit on the basis of a detected position of said index detected by said detecting [[means]] unit, and

calculation means for calculating unit adapted to calculate the attitude and/or position of said measurement object on the basis of said measured value and said calculation information updated by said updating [[means]] unit.--

Please amend the paragraph beginning on page 4, line 21, and ending on page 5, line 2, as follows:

--Also, said target image setting [[means]] <u>unit</u> obtains a prediction position of an index in said picked-up image, employing said measured value and said calculation information stored in said storage [[means]] <u>unit</u>, creates an image with a peripheral area around said prediction position in said picked-up image subjected to a rotational process on the basis of a rotational angle of said image pick-up device in a roll direction that is derived from said measured value, and outputs said image as a target image.--